

Structures of the female genitalia in Tortricidae



Lepidoptera Course
SWRS, Portal, AZ
8-16 August 2017

Female Genitalia

- Papillae anales (ovipositor lobes)
- Apophyses
 - Apophyses posteriores
 - Apophyses anteriores
- Sterigma
 - Lamella antevaginalis
 - Lamella postvaginalis
 - Ostium
- Ductus bursae
 - Ductus seminalis
- Corpus bursae
 - Signum



Olethreutinae: Eucosmini



Tortricinae: Archipini

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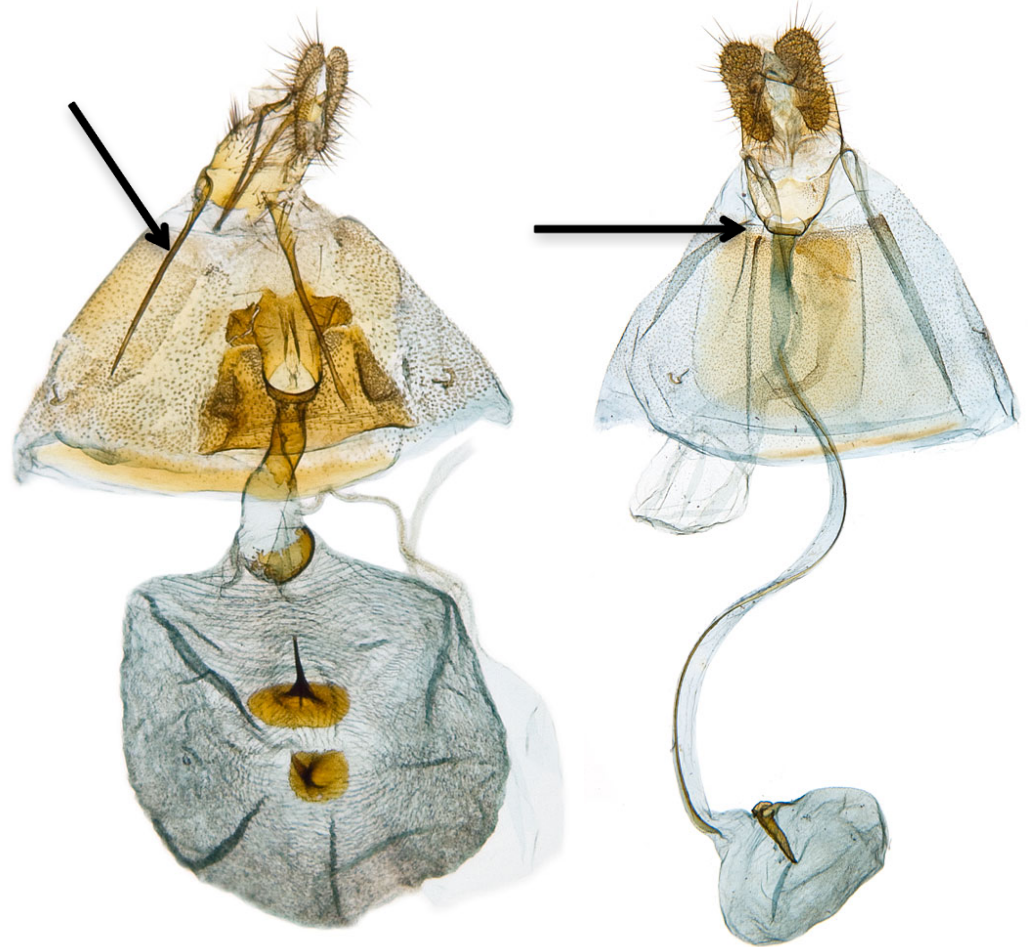
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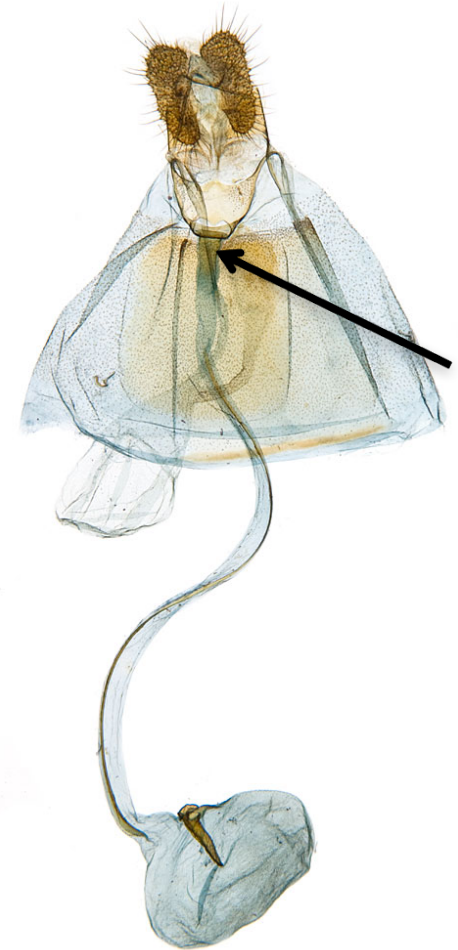
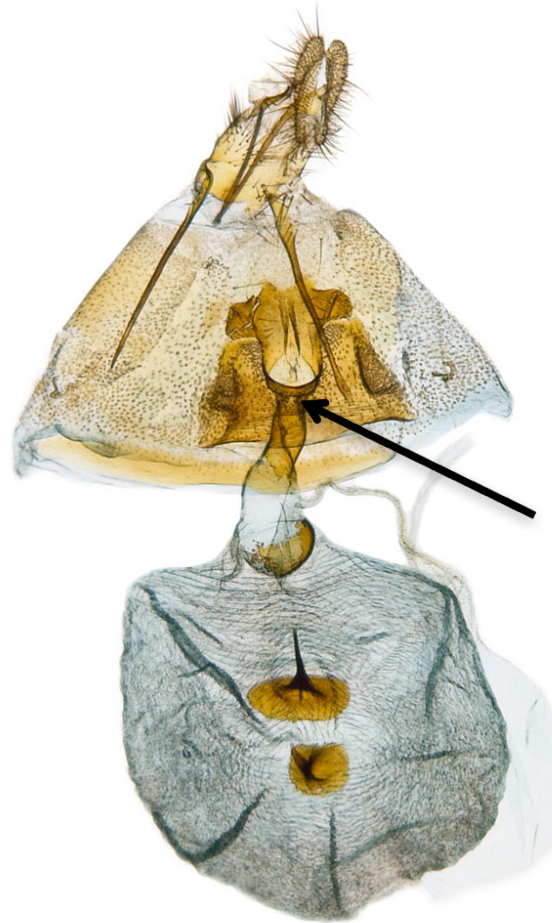
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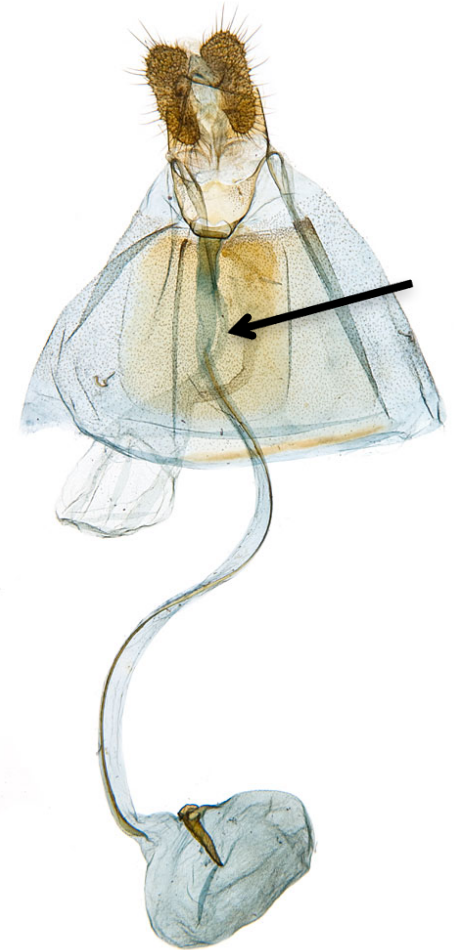
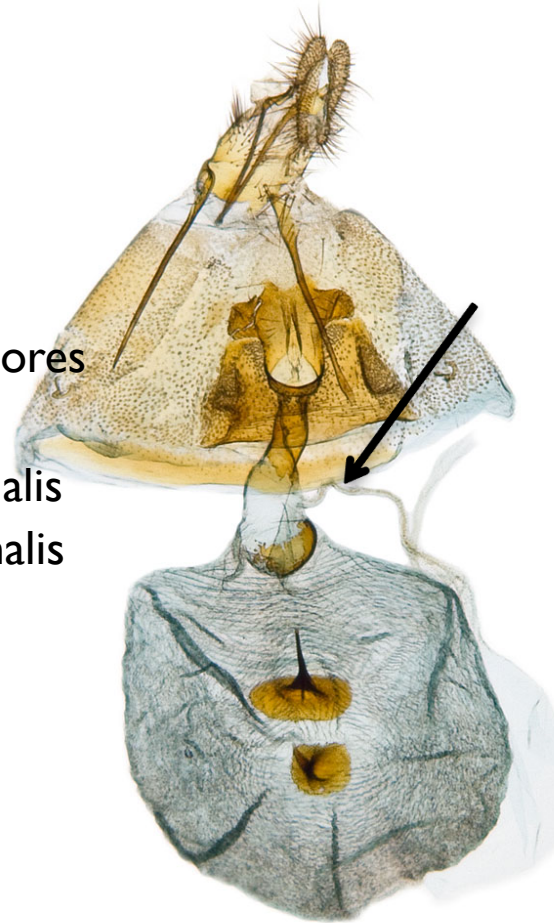
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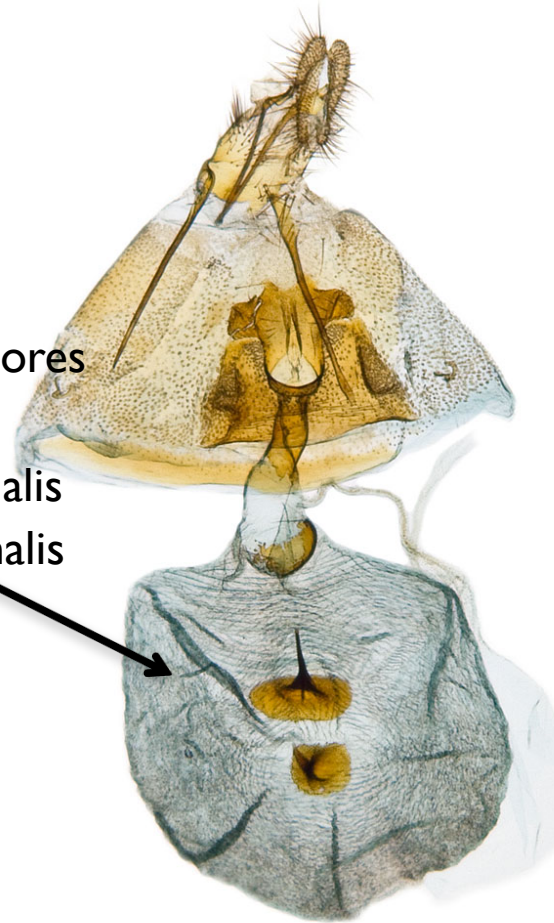
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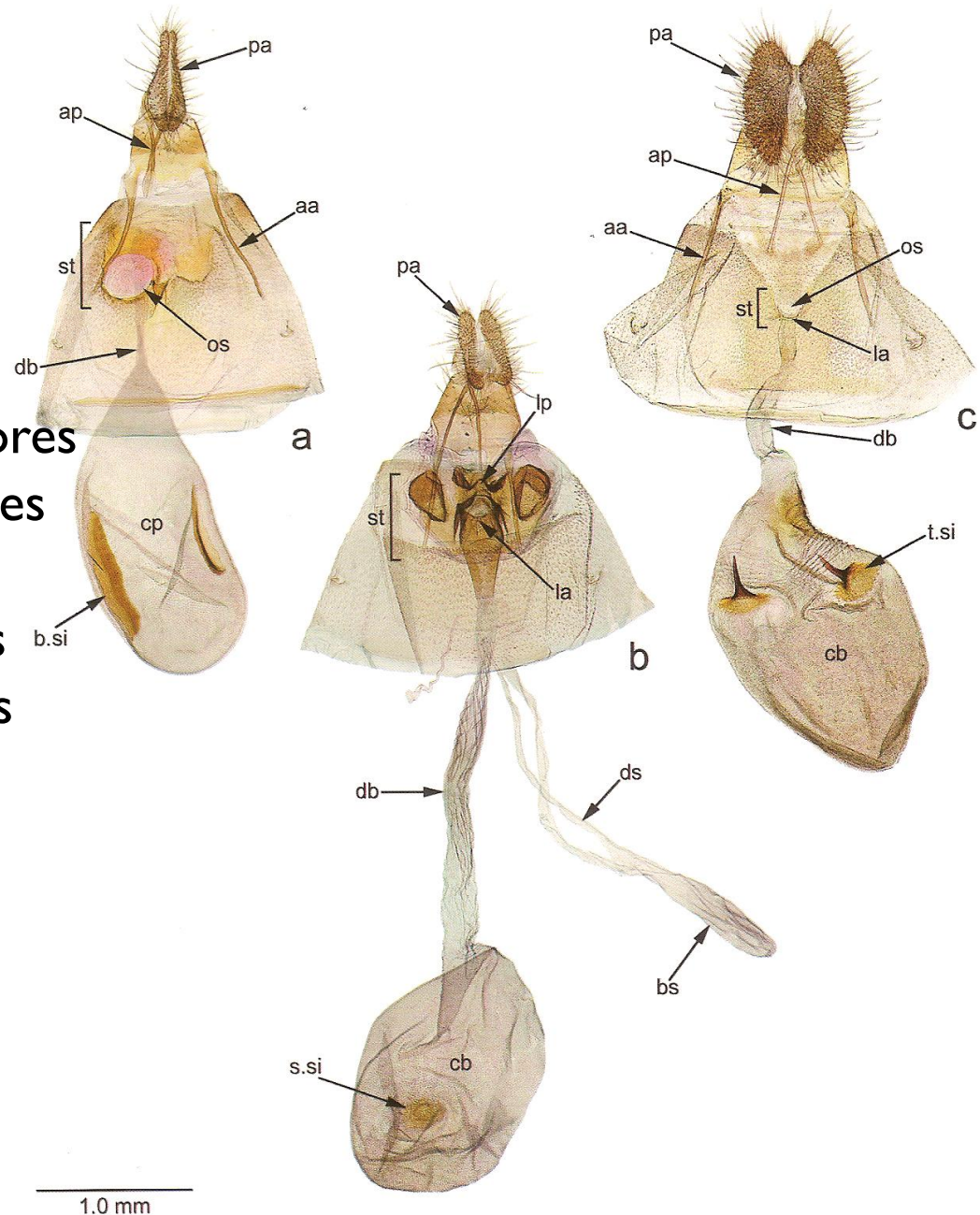
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Female genitalia summary

- pa - papillae anales
- ap - apophyses posteriores
- aa - apophyses anteriores
- st - sterigma
- la - lamella antevaginalis
- lp - lamella postvaginalis
- os - ostium
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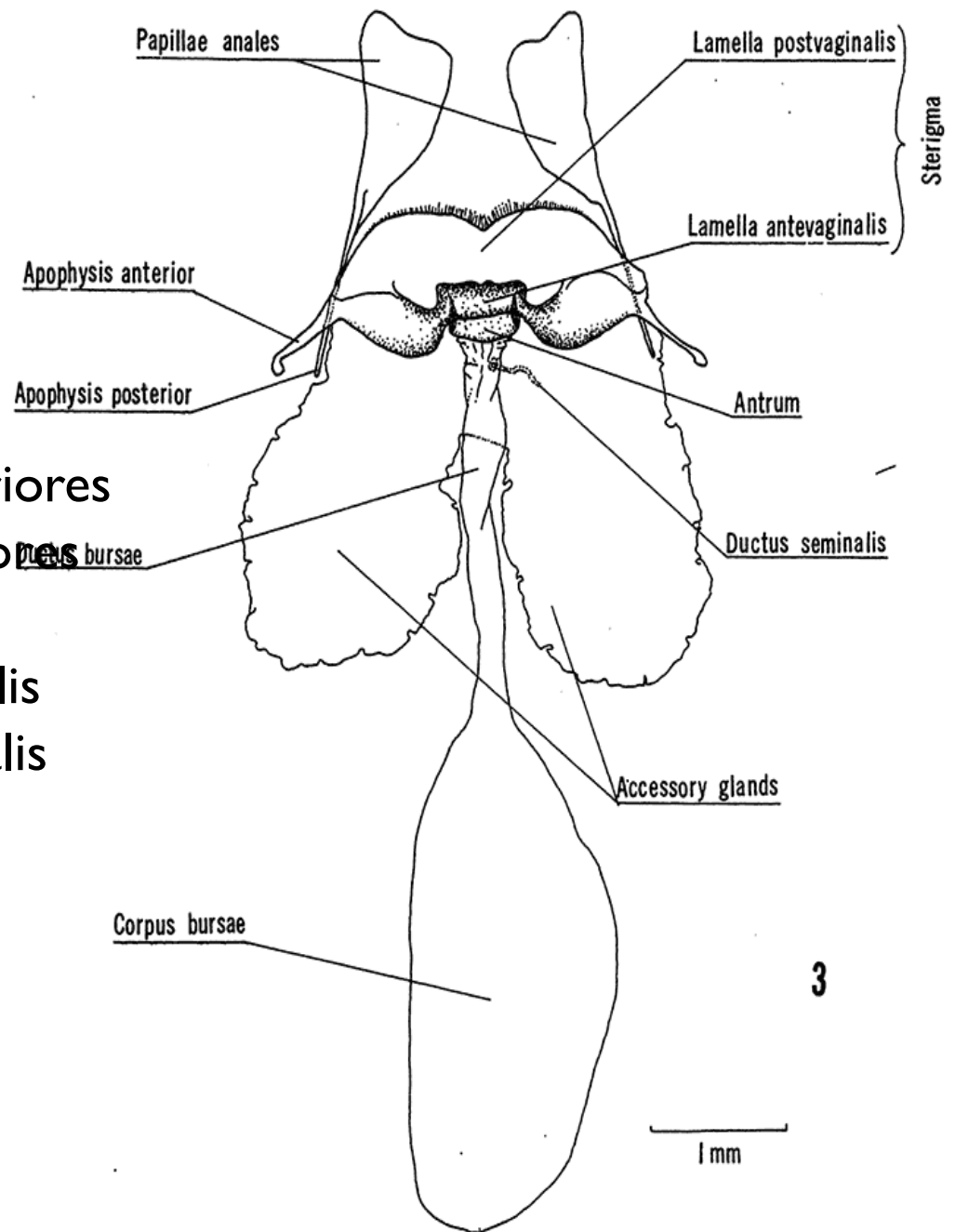


Figure 3. *Urbanus*. ♀ genitalia illustrating nomenclature used; *U. p. proteus*, Guatemala: Km. 170 C. A. Hwy. 9400', Genit. Prep. SRS-402.

Dissecting the female genitalia of Tortricidae



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Dissecting the genitalia of Tortricidae

- There is a guide for dissecting genitalia on the TortAI CDRom, and also on the internet at: <http://idtools.org/id/leps/tortai/dissections.html>
- There also is a Mississippi State video on the internet of Sangi Lee dissecting the genitalia of the cactus moth at: https://www.youtube.com/watch?v=vXhz_66YVjo
- For rapid, generally destructive methods to observe diagnostic characters, less care can be taken. However, for dissections that will later be slide-mounted for preservation in collections, the methods are more rigorous, and greater care must be taken.

Dissecting female genitalia

- **I. After the abdomen has been macerated in KOH, transfer it to water.**



Dissecting female genitalia

- **2. Gently squeeze out the internal material with a brush or forceps by flattening the abdomen dorso-ventrally, and begin to clean the pelt. Be careful not to break the ductus bursae inside.**



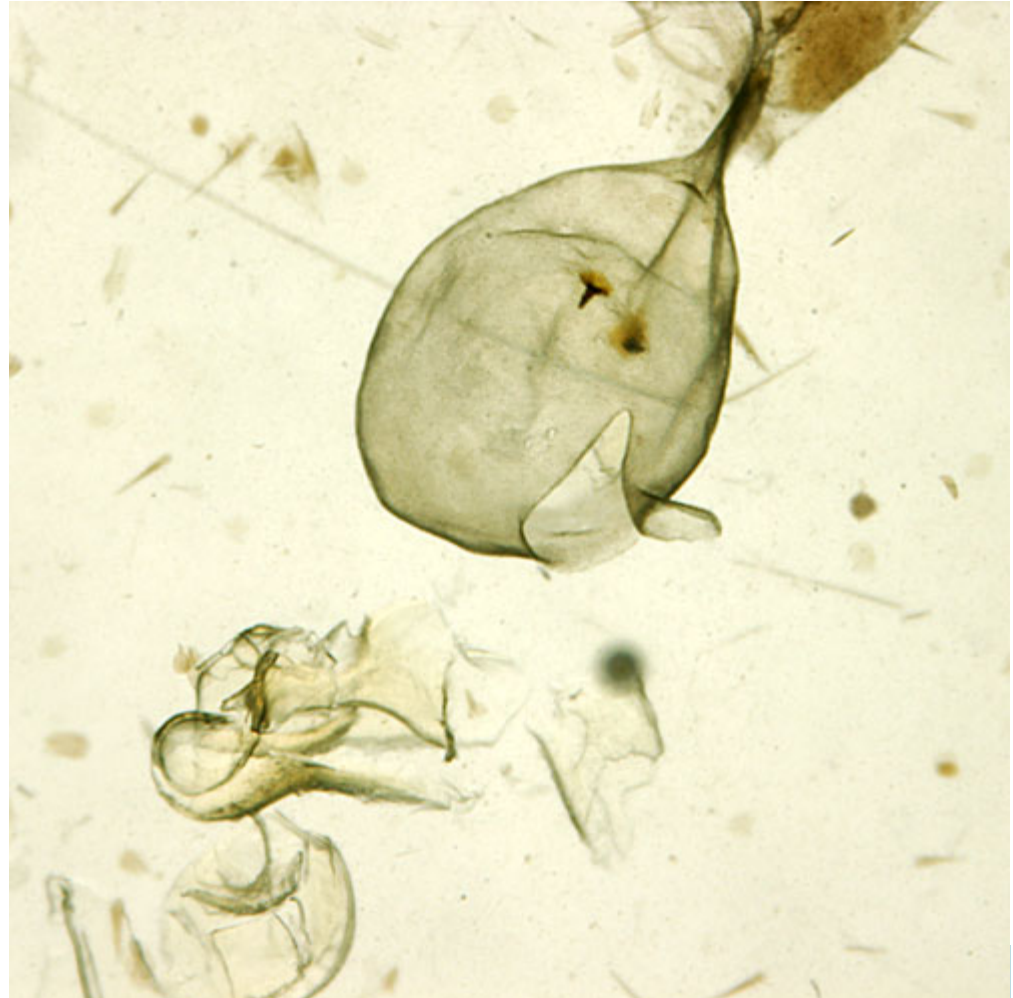
Dissecting female genitalia

- 3. Once the abdomen has been cleaned preliminarily, transfer it to 70% alcohol. Carefully tear the abdominal pelt at the intersegmental membrane between the sixth and seventh segments. Be careful not to break the ductus bursae.



Dissecting female genitalia

- **4. Continue cleaning the scales from the pelt and the genitalia. If spermataphores are present, make a small incision in the corpus and remove them. [If you want.]**



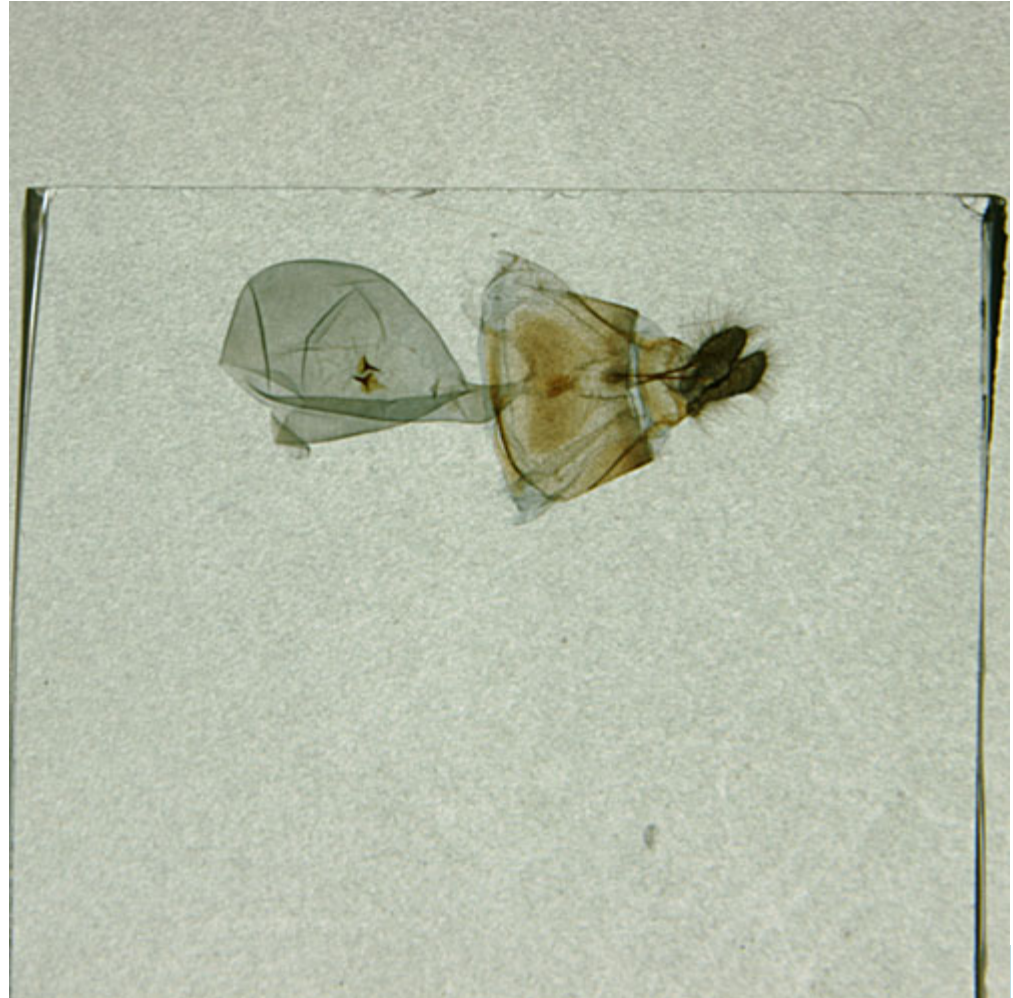
Dissecting female genitalia

- **5. Continue cleaning the pelt and the genitalic capsule.**



Dissecting female genitalia

- **6. If the genitalia will be slide mounted, flatten them under a glass chip in 100% alcohol.**



Dissecting female genitalia

- **7. Clean the pelt completely and transfer it to 100% alcohol and flatten under a glass chip.**



Dissecting female genitalia

- **8. After the genitalia and pelt have become rigid and dehydrated, place them onto a micro slide using Canada balsam or euparal.**

